# **Importance Of Tendons And Tissues In Sports**

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Tendons And Tissues are very significant injuries to have in sports because they affect how your muscles move and how they work.

#### Tendon:

A tendon is actually a type of connective tissue. To be more specific it is a tough, band-like fibrous connective tissue that connects your muscles to your bones. Tendons are used to absorb tension and help muscles to move bones. Tendons are composed of many different components but some of the main components are collagen, elastin and proteoglycans.

## Collagen:

 Collagen is the main structural protein of many different connective tissues. Collagen is responsible for between 1 to 2 percent of muscle tissue and is also responsible for 6 percent of tendinous muscles.

### Elastin:

• Elastin is a very elastic protein that is found in connective tissues. It allows tissues in the body to go back to their normal shape after stretching or contracting them and it allows skin as well to do that same function after being poked or pinched. Elastin is encoded by the "ELN Gene" on humans. The ELN Gene is a gene that encodes one of the two elastic fibers which helps the process of contracting and returning to normal form.

### **Proteoglycans:**

•	Proteoglycans are proteins that are heavily glycosylated. They are also part of the Protein
	core and can affect the stability of proteins.